

MODEL: 75-075 M1

# 1" HOLLOW CHISEL MORTISER

## OPERATING MAINTENANCE INSTRUCTIONS

#### **FEATURES**

- Heavy-duty cast-iron construction, machined with precision.
- \* Head gas cylinder provides smooth performance.
- \* Control rods for depth and length stop.
- \* 5/8" and 3/4" sleeves for chisel shank.
- \* Threaded rod and vise clamp with handwheel.
- Heavy-duty rack and gear provides the entire head to lower in order to feed mortiser accurately into workpiece.
- \* Solid steel arm with grip handle for operations.
- \* Molded cast-iron column machined with precision.
- Hand wheels can be used to move cast-iron table un longitudinal and lateral directions.
- Enclose fan cooled motor with starter capacitor and ribbed body for resistance and long life.
- Switch with dust protection.

#### **SPECIFICATIONS**

Chisel capacity:

1/4" TO 1"

Maximum chisel stroke:

8"

Distance from fence to center chisel:

3"

Distance from chisel (1/4") to table: 6.5 "~10.2"

Chuck capacity:

1/2"

Table size:

7.3" x 18"

Base size:

12" x 17"

Overall height:

38"

Spindle speed:

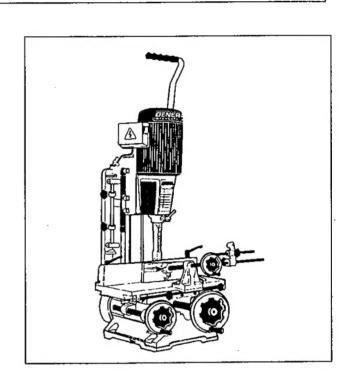
1720 R.P.M.

Motor:

1 H.P. 115 V/230V 1 ph

Weight:

215 LBS



MODEL NO.-

75-075 M1

SERIAL NO. -

IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.

All replacement parts can be obtained from:

GENERAL® INTERNATIONAL MFG CO. LTD.

8360, Champ-D'eau

MONTREAL, QUEBEC, H1P 1Y3

TEL.: (514) 326-1161 FAX: (514) 326-5555

E-mail: generalint@aol.com

# **SAFETY RULES**

# READ CAREFULLY BEFORE OPERATING THE MACHINE

- Learn the machine's applications and limitations, as well as the specific potential hazards particular to this machine. Follow available safety instructions and safety rules carefully.
- 2. Keep working area clean and be sure adequate lighting is available.
- Do not wear loose clothing, gloves, bracelets, necklaces, or omaments. Wear face, eye, ear, respiratory and body protection devices, as indicated for the operation or environment.
- Keep hands well away from bits, chisels and all moving parts. Do not clear chips and sawdust away with hands. Use a brush.
- Make sure the bit is at operation speed before mortising.
- Do not push the chisels to hard. The bits and chisels will perform better and be safer working at the rate for which it was designed.
- Whenever possible use a dust collector with shaving hood to minimize health hazards.
- 8. Never leave the machine with the power on.
- Keep children away. Make sure that visitors are kept at a safe distance from the work area.
- Use recommended speed mortising accessory, and workpiece material.
- Never stand on tool. Senous injury could occur if the tool is tipped or if the sanding tool is unintentionally contacted.
- Be sure bits and chisels are securely locked in the machine.
- Use suitable support if stock does not have a flat surface.

- Do not force the machine. It will do the job better and be safer at a rate for which it was designed.
- 15. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning make sure it is properly attached before using the tool again.
- Be sure that key and adjusting wrenches have been removed before turning power on.
- Use only accessories designed for the machine.
- 18. Make sure tool is properly grounded. If tool is equipped with three-prong plug, it should be plugged into a three-pole electrical receptacle. Never remove the third prong.
- Always disconnect tool before servicing and when changing accessories such as bit and chisel.
- 20. Make sure that switch is in "OFF" position before plugging in cord.
- 21. Hold material firmly against the table.
- Use ONLY recommended accessories. Use of accessories NOT recommended by General International may result in a risk of injury.
- 23. Do not use this mortising machine for other than it's intended use. If used for other purposes, General International disclaims any real or implied warranty and holds itself harmless for any injury, which may result from that use.

# **GENERAL® INTERNATIONAL guarantee**

All component parts of GENERAL INTERNATIONAL machinery are carefully inspected during all production stages and each machine is thoroughly inspected upon completion of assembly. Because of quality, GENERAL INTERNATIONAL agrees to repair or replace any genuine part or parts which, upon examination, proves to be defective in workmanship or material within a period of 24 months from date of purchase. In order to obtain warrantee, all defective parts must be returned prepaid to GENERAL INTERNATIONAL MFG. Co Ltd. Repairs made without our written authorization voids all guarantees.

### HOLLOW CHISEL MORTISER 75-075

**GENERAL® INTERNATIONAL** Mortiser's are carefully tested and inspected before shipment and if properly used will give perfect results. However, a reasonable amount of care and attention is necessary to ensure perfect performance and accurate work. It is imperative that you take a few moments to familiarise yourself with these instructions, as they will no doubt save you a lot of time and trouble.

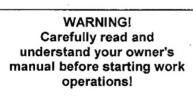
#### UNPACKAGE AND CLEANUP

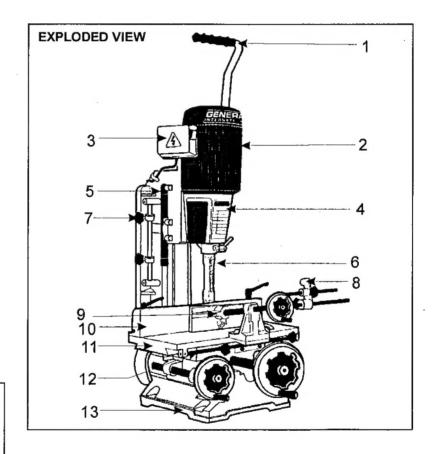
To ensure maximum performance from your *GENERAL® INTERNATIONAL* Hollow Chisel Mortiser, clean it properly; and install it accurately before use. As soon as you receive the 75-075, we recommend you follow these procedures:

- 1. Finish removing the contents of the shipping carton and compare with the content list.
- 2. Report damage, if any to your local distributor.
- 3. Clean all rust protected surfaces with a mild solvent or kerosene. Do not use lacquer thinner, paint thinner, or gasoline. These will damage painted surfaces.
- 4. To prevent rust, apply a light coating of paste wax to surface.

#### PARTS DESCRIPTION

- 1. Operating Handle
- 2. Motor
- 3. Switch
- 4. Head
- 5. Gas Spring
- 6. Chisel & Bit
- 7. Depth stop
- 8. Work stop
- 9. Vise
- 10. Fence
- 11. Table
- 12. Slide
- 13. Base





#### WARNING!

Carefully read and understand your owner's manual before starting work operations!

#### WARNING!

Machine must be properly grounded at all times to avoid electric shock to the work operator!

#### **ELECTRICAL REQUIREMENTS**

Before connecting the machine to the power source, verify that the voltage corresponds as specified on the nameplate of the machine. A power source with greater voltage than needed can result in serious injury to the user as well as damage the machine. If in doubt, contact a qualified electrician before connecting to the power source.

The Mortiser 75-075 has been pre-wired at the factory for 115V operations. To avoid shock or fire, replace the power cord if it gets worn out, cut or damaged in any way. Replace immediately before performing work operations.

#### INSTALLATION AND SETUP

(4) Holes have been designed at the base of the cast iron to conveniently bolt and fasten your 75-075 Mortiser to a workbench (optional stand item 75-045), or a solid work surface. Place your machine on the worktable; use a marker to indicate the areas where the holes must be drilled. Properly fasten and bolt to surface. (Bolts and nuts not provided)

**Note:** Work area must provide enough space on both sides of the machine to allow movement for the work operator and clearance for long work materials. Avoid installing the machine in a small or dark work area, no obstacles should interfere when work operations are being performed.

# CHISEL & BIT INSTALLATION / REPLACEMENT (FIG.2)

- Gently loosen lock knob; install your chisel and bit as illustrated. Chisel must be positioned and pushed up against the bushing and into the slot, set the slot to the right or the left this will permit loose chips to unload from chisel when cutting mortises.
- 2. Gently re-tighten the lock knob in order to hold in position.
- Loosen chuck and move the bit into the chuck in order to adjust the position of the bit.
- 4. The lower end of the bit must jut out from below the chisel between 1/16" to 3/16"; according to the workpiece and the work operations that need to be performed.
- 5. Re-tighten the chuck.

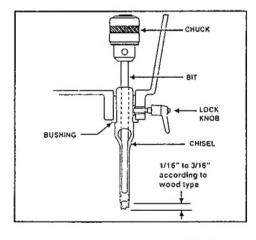


Fig.2

#### MORTISING

To prevent burning at the tip of the bit, a fast and steady feed rate is required. Consider the type of material before feeding, the machine may stall or slow down if the feed rate is too fast. Perform practice cuts before starting work operations, various work material require different feedings.

To avoid overheating or rupture to the chisel or bit; do not position the slot against the blind end of the mortise; this will prevent the chips to unload from the chisel.

#### **WORK OPERATIONS**

- 1. Depth stop must be set to the required depth of cut (Fig.3).
- Place your workpiece on table; lock into position using the vise clamp. Turn handwheel in order to move the table forward or backwards. Adjust table in accordance with the workpiece to be mortised.
- 3. Adjust the stops according to the length of cut required (Fig.4).
- 4. Press the "On" switch; steadily and firmly feed the chisel and bit into the workpiece by pulling down on the operating handle.
- To prevent burning at the tip of the bit; a fast and steady feed rate is required. Consider the type of material before feeding, the machine may stall or slow down if the feed rate is too fast.
- 6. Perform practice cuts before starting work operations, various work material require different feedings
- Complete the first mortising cut; carry the workpiece towards the proper direction of the chisel slot to permit chips to unload clearly. Move the workpiece in order for the chisel slot to release chips into the already cut part of the mortise (Fig.5).
- 8. To permit chips to unload while mortising deep cuts; the cuts must be carried out in several steps of 1" each cut. Place a piece of scrap wood under the back end to support the workpiece, this will prevent breakage at the back end.

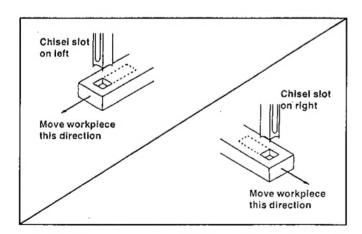


Fig.5

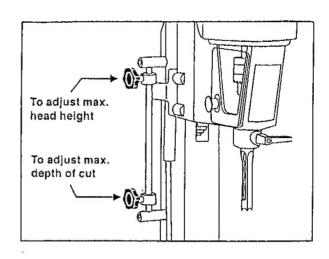


Fig.3

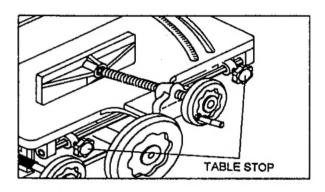


Fig.4

ATTENTION!

Never attempt to leave the machine running unattended!

WARNING!
Always disconnect the machine from the power source when not in use!

#### SHARPENING BIT AND CHISEL

To ensure perfect performance and accurate work, it is necessary to keep bit and chisel sharp at all times. Dull bit or chisel can cause overheating and breakage resulting in unsatisfactory and inaccurate results. If chisel and bit are badly worn and become difficult to sharpen, they must be replaced immediately.

To sharpen: trace the original shapes and curves of the bit with a small smooth filer. To restore sharpness, file the inside edge of the spur, the sides of the brad point and the cutting edge inwards towards the flutes of the bit (Fig.6). Never attempt to sharpen the outside edge of the spur this will affect the diameter and performance of the bit.

Chisel should always be sharpened with a proper size mortise chisel cutter. Verify the dullness of the chisel, two or three turns of the cutter in a carpenter's hand brace should be enough to sharpen the chisel. (Fig.7)

Relieve the inner corners of the chisel with a small triangular smooth filer. Remove any particles from the outside of the chisel with a fine oilstone. (Fig 8)

Chisel and bit will need to be replaced after a long period of use. Worn out tools will result in inaccurate and unsatisfactory work operations.



Disconnect machine from power source before performing any repairs or adjustments!

Failure to comply can cause serious damages to the work operator and the machine!

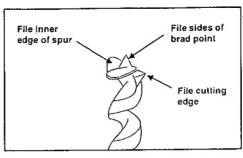


Fig.6

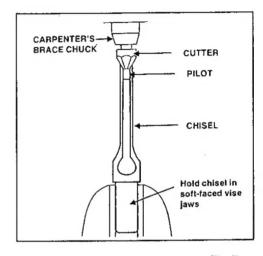


Fig.7

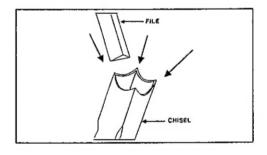


Fig.8

#### **MAINTENANCE**

- 1. Machine should be cleaned and dusted after work operations are completed.
- Occasionally lubricate the column, linkages and all other moving parts using a general-purpose oil or grease.
- 3. Adjust and sharpen the chisel and bit when required.

#### **TABLE ANGLE ADJUSTMENT**

- 1. Loosen lock knob (A) and (B). (Fig.9)
- 2. Point the scale (D) to adjust fence (C) to the desired angle 0° 30°.
- 3. Tighten lock knob (A) and (B).

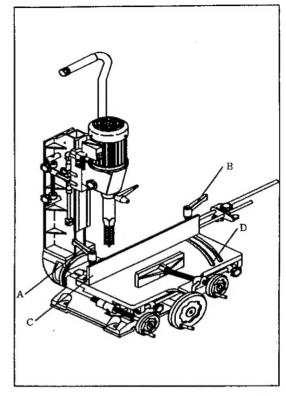


Fig.9

#### **HEAD ANGLE ADJUSTMENT**

- Using open wrench 19mm to loosen screw (E) counter-clockwise. (Fig.10)
- 2. Minor tighten screw (H) for slight separating bracket (I) and base (J), if the head can not be moved.

**Attention**: Be sure to hold the head when swivel the head to desired angle to avoid the serious injuries.

- 3. Pull the pin outward to move the head to desired angle.
- 4. Adjust the head to desired angle.
- 5. Loosen screw (H) and tighten secure screw (E).

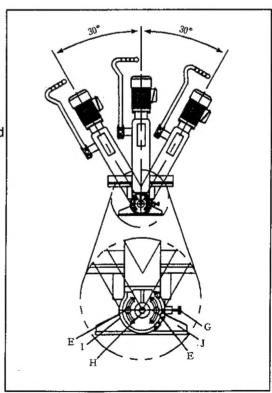


Fig.10

## PARTS LIST 75-075

PART NO.	DESCRIPTION	QTY
75075 - 01	BASE	1
75075 - 02	ADJUSTING BAR	1
75075 - 03	ROD SCREW	1
75075 - 04	HANDWHEEL	1
75075 - 05	SCREW M8	1
75075 - 06	SPRING WASHER 5/16	1
75075 - 07	WASHER 5/16	4
75075 - 08	SCREW 5/16X1-1/4	4
75075 - 09	DEPTH STOP BAR	1
75075 - 10	KNOB	2
75075 - 11	ADJUSTING SLEEVE	2
75075 - 12	SCREW 5/16X3/8	5
75075 - 13	BAR	2
75075 - 14	SCREW 1/4X3/8	1
75075 - 15	CORD CLAMP	1
75075 - 16	HEAD SUPPORT	1
75075 - 17	RING	1
75075-17-1	RING	1
75075 - 18	HANDLE GRIP	1
75075 - 19	HANDLE	1
75075 - 20	HANDLE SHAFT 6/15	1
75075 - 21	PIN	1
75075 - 22	GEAR	1
75075 - 23	HANDLE BODY	1
75075 - 24	PIN 8	1
75075 - 25	RING 15	1
75075 - 26	SLIDEPLATE GUARD	1
75075 - 27	SLIDEPLATE GUARD	1
75075 - 28	HANDLE 5/16	2
75075 - 28-1	HANDLE 3/8	1
75075 - 29	GEAR	1
75075 - 30	PIN 5/15	1
75075 - 31	GEAR SHAFT	1
75075 - 32	HANDWHEEL 6"	2
75075 - 33	GAS SPRING	1

PART NO.	DESCRIPTION	QTY
174(1740)	2200111111111	[
75075 - 34	SCREW 1/4X1"	4
75075 - 35	· HEAD	1
75075-35-1	HEAD BODY	1
75075 - 36	STOP PLATE	1
75075 - 37	SCREW 1/4X3/4	2
75075 - 38	SCREW 1/4X5/8	2.
75075 - 39	RACK	1
75075 - 40	SLIDE PLATE	1
75075 - 41	MOTOR	. 1
75075 - 42	SCREW 5/16X3/4	3
75075 - 43	NUT 5/16	3
75075 - 44	CHUCK	1
75075 -44-1	CHUCK (OPTIONAL)	1
75075 - 45	CHISEL & BIT	
75075 - 46	BUSHING 5/8, 3/4	2
75075 - 47	DRILL SHAFT (OPTIONAL)	1
75075 - 48	TABLE	1
75075 -48-1	FENCE	1
75075 - 49	SHAFT BOLT	1
75075 - 50	ADJUSTING SLEEVE	2
75075 - 51	LOCK KNOB	2
75075 - 52	LONG STOP PLATE	1
75075 - 53	SPRING WASHER 1/4	2
75075 - 54	SCREW 1/4X5/8	2
75075 - 55	LONG STOP BODY	1
75075 - 56	SWITCH	1
75075 - 57	LONG STOP BAR (A)	1
75075 - 58	LONG STOP BAR (B)	1
75075 - 59	KNOB	1
75075 - 60	VISE PLATE	1
75075 - 61	SCREW ROD	1
75075 - 62	VISE BODY	1
75075 - 63	HANDWHEEL	1
75075 - 64	WASHER 5/16	2
75075 - 65	SCREW 5/16X1-3/4	2

## PARTS LIST 75-075

PART NO.	DESCRIPTION	QTY
75075 - 66	NUT 5/16	10
75075 - 67	WASHER 5/16	2
75075 - 68	RACK	1
75075 - 69	SCREW 5/16X5/8	3
75075 - 70	SLIDE BODY	1
75075 - 71	SCREW 5/16X5/8	6
75075 - 72	CHUCK COVER	2
75075 - 73	WASHER 1/4	2
75075 - 74	KNOB	2
75075 - 75	SCREW 1/4X3/4	1
75075 - 76	LOCK KNOB	1
75075 - 77	ADJUSTING BRACKET	1
75075 - 78	WASHER 3/8	1
75075 - 79	BOLT 3/8X4-7/8	1
75075 - 81	BRACKET	1
75075 - 82	SCREW 1/2X1-3/4	2
75075 - 83	SCREW 1/2X2-5/8	1
75075 - 84	WASHER 1/2	3
75075 - 85	LOCK KNOB M10	1

PART NO.	DESCRIPTION	QTY
75075 - 86	LOCK KNOB M10	1
75075 - 87	SCALE	1
75075 - 88	NUT 5/16	1
75075 - 89	SCALE	1
75075 - 90	POINTER	1
75075 - 91	SCREW 3/16X3/8	1
75075 - 92	SCREW 5/16X1	2
75075 - 93	LOCK KNOB	1
75075 - 94	SCREW 1/4	2
75075 - 95	SLEEVE	1
75075 - 96	PIN	1
75075 - 97	BAR	1
75075 - 98	SCREW 5/16X1	2
75075 - 99	NUT 1/4	1
75075-100	SCREW 1/4X1"	1
75075-101	NUT 1/4	3
75075-102	SCREW 1/4X1"	3
75075-103	NUT	1
75075-104	NUT 3/8	1

